

IN THE CLAIMS

Please cancel without prejudice claims 13-26 and add the following:

Claims 13-26 cancelled.

27. (New) A process for synthesizing metal borohydride alkali solutions which comprises:

synthesizing a carrier powder for proton H;

bonding hydrogen to said carrier powder;

producing metal borohydride powder from said carrier powder;

treating said metal borohydride powder with an alkali solution to produce a metal borohydride alkali solution.

28. (New) The process according to claim 27 wherein synthesizing a carrier powder for proton H comprises:

forming a mixture of a metal that is capable of forming hydrides with hydrogen with less than about 50 wt% of a hydrogen storage alloy;

mechanically pulverizing said mixture;

mechanically mixing the resulting pulverized mixture with less than about 100 wt% of alkali compounds; and

subjecting the resulting mixture to water vapor at less than one atmosphere for less than about 48 hours to produce a proton H carrier powder.

29. (New) The process according to claim 27 wherein synthesizing a carrier powder for proton H comprises:

forming a mixture of a metal with less than about 10 wt% carbon black coated with a metal selected from the group consisting of a platinum, palladium and mixtures and alloys thereof; and

mechanically pulverizing said mixture.

30. (New) The process according to claim 27 wherein bonding hydrogen to said proton H carrier powder comprises subjecting said proton H carrier powder to hydrogen gas at a pressure of less than about 50 atmospheres at a temperature from ambient to about 400°C for less than 48 hours so that hydrogen is carried by said carrier powder.

31. (New) The process according to claim 27 wherein producing a metal borohydride powder from said proton H carrier powder comprises mixing a quantity of said proton H carrier powder with a non-aqueous metal boron oxide or borax and pulverizing the resulting mixture for less than 48 hours under hydrogen gas at a pressure of less than about 50 atmospheres so that a metal borohydride powder is produced.

32. (New) The process according to claim 27 wherein treating of said metal borohydride powder with an alkali solution comprises adding said metal borohydride powder to an alkali solution; and

filtering out precipitates, leaving metal borohydride alkali solution.

33. (New) A process for synthesizing substantially pure metal borides which comprises:

synthesizing a carrier powder for proton H;

bonding hydrogen to said carrier powder;

producing a metal borohydride powder from said carrier powder;

dissolving said borohydride powder with a suitable solvent;

filtering precipitates; and

evaporating said suitable solvent to leave substantially pure metal borohydride.

34. (New) The process according to claim 33 wherein synthesizing a carrier powder for proton H comprises:

forming a mixture of metal that is capable of forming hydrides with hydrogen with less than about 50 wt% of a hydrogen storage alloy;

mechanically pulverizing said mixture;

mechanically mixing the resulting pulverized mixture with less than about 100 wt% of alkali compounds; and

subjecting the resulting mixture to water vapor at less than one atmosphere for less than about 48 hours to produce a proton H carrier powder.

35. (New) The process according to claim 33 wherein synthesizing a carrier powder for proton H comprises:

forming a mixture of metal with less than about 10 wt% carbon black coated with a metal selected from the group consisting of platinum, palladium and mixtures and alloys thereof; and

mechanically pulverizing said mixture.

36. (New) The process according to claim 33 wherein bonding hydrogen to said proton H carrier powder comprises subjecting said proton H carrier powder to hydrogen gas at a pressure of less than about 50 atmospheres at a temperature from ambient to about 400°C for less than about 48 hours so that hydrogen is carried by said carrier powder.

37. (New) The process according to claim 33 wherein producing a metal borohydride powder from said carrier comprises mixing a quantity of said proton

H carrier powder with a non-aqueous metal boron oxide or borax and pulverizing the resulting mixture for less than about 48 hours under hydrogen gas at a pressure of up to about 50 atmospheres so that a metal borohydride powder is produced.

38. (New) The process according to claim 33 including forming a substantially pure metal borohydride by dissolving said metal borohydride powder into a liquid that can dissolve metal borohydrides;

filtering the resulting solution; and

evaporating the resulting liquid to obtain substantially pure metal borohydride.

39. (New) The process of synthesizing metal borohydrides which comprises:

forming a mixture of a metal that is capable of forming hydrides with hydrogen with less than about 50 wt% of a hydrogen storage alloy;

mechanically pulverizing said mixture;

mechanically mixing the resulting pulverized mixture with less than about 100 wt% of alkali compounds;

subjecting the resulting mixture to water vapor at less than one atmosphere for less than about 48 hours to produce a proton H carrier powder;

subjecting said proton H carrier powder to hydrogen gas at a pressure of less than about 50 atmospheres at a temperature from ambient to about 400°C for less than about 48 hours so that hydrogen is carried by said carrier powder;

mixing a quantity of said carrier powder with metal boron oxide or borax and pulverizing the resulting mixture for less than about 48 hours under

hydrogen gas at a pressure of less than 50 atmospheres so that a metal borohydride powder is produced;

adding said metal borohydride powder to an alkali solution; and

filtering out precipitates, leaving a metal borohydride alkali solution.

40. (New) The process of synthesizing substantially pure metal borohydride which comprises:

forming a mixture of a metal that is capable of forming hydrides with hydrogen with less than about 50 wt% of a hydrogen storage alloy;

mechanically pulverizing said mixture;

mechanically mixing the resulting pulverized mixture with less than about 100 wt% of alkali compounds;

subjecting the resulting mixture to water vapor at less than one atmosphere for less than about 48 hours to produce a proton H carrier powder;

subjecting said proton H carrier powder to hydrogen gas at a pressure of less than about 50 atmospheres at a temperature from ambient to about 400°C for less than about 48 hours so that hydrogen is carried by said carrier powder;

mixing a quantity of said carrier powder with boron oxide or borax and pulverizing the resulting mixture for less than about 48 hours under hydrogen gas at a pressure of up to about 50 atmospheres so that a metal borohydride powder is produced;

dissolving said metal borohydride powder into a liquid that can dissolve metal borohydrides;

filtering the resulting solution; and

evaporating said liquid to obtain substantially pure metal borohydride.